

## SECTION B

### STORAGE AND TRANSMISSION

While remarkably compact in conveying meaning to our brains, visual information takes up a lot of space in electronic form. And as many have discovered to their foot-tapping chagrin, it also takes an awfully long time to download. War-weary military planners and HMO-frazzled doctors alike must be able to store and quickly recall information if it is to be of value. A wider data-transfer conduit can be achieved in a number of ways; fiber-optic technologies have already greatly improved and continue to increase the carrying capacity of the information pipeline. In addition, new optical media can be manipulated to store data more compactly.

1. A university-based network testbed that will employ advanced optical switching and multiplexer technologies to enable distributed image processing and shared access at transfer rates greater than 1 gigabit per second.